



COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH

Human Resource Development Group

CSIR Complex, Library Avenue, Pusa, New Delhi 110 012

Tel : 011 2584 1037

Email: symposia_travel@gmail.com, web <http://csirhrdg.res.in>

Hemant Kulkarni
Senior Principal Scientist

Ref No. SYM/10641/21-HRD
June 22, 2021

Dr V Sangeetha
Associate Professor
Dept. of Food Technology
Kongu Engineering College, Erode - 638 060 Tamil Nadu

SUBJECT: National Workshop on Novel Approaches in Food Processing & Waste Valorisation (NAFPWV) during Jul 01-02, 2021 at Kongu Engineering College, Erode

Dear Dr Sangeetha

With reference to your application on the above subject, we are happy to inform you that Director General, CSIR has been pleased to sanction a grant of **Rs.25000/- (Rupees Twenty Five Thousand Only)** subject to the following conditions:

1. The grant received from CSIR should be duly acknowledged by email along with a certificate that the grant would be specifically utilized for the purpose for which it has been sanctioned.
2. The grant may be reimbursed within four months from the date of Conference/Seminar/Workshop etc. is over by filling-in the Grant-in-Aid Bill Form in duplicate duly signed and rubber stamped by the concerned officials, indicating clearly the designation of the official along with Audited Statement of Expenditure for release of grant. Current Proforma for Grant-in-aid bill, Audited Statement of Expenditure and NEFT are available on our website <http://csirhrdg.res.in/Home/Index/1/InPage/53/14>. If any Utilization Certificates of Previous Grant for symposia (as per Col.No. 15 of the Application Performa) is not submitted till date, please attach copies of Utilization Certificates also. Any claim received beyond 4 months will be entertained only in exceptional cases subject to submission of reasons for delay, duly forwarded through Head of the Organization. In no case, the claim will be entertained after 6 months. All the pages of above documents should be self attested by the organizer.
3. Invitation cards should be sent to the Director General, CSIR and Head, HRDG CSIR may nominate three scientists for the above event and registration fee should not be charged from them. In case of nomination, the Head, HRDG or the undersigned would issue a letter with a copy to the nominee(s).
4. Softcopy (preferably in Pen Drive/CD/ DVD in PDF format) of the full paper proceedings of above event should be sent to the undersigned
5. An overall activity report by the Convener / Organizing Secretary should be made available by email to us with regard to outcome of the gathering, the recommendations and plan of action for future. The names, addresses & email IDs of the participants / delegates should also be sent immediately after the event by email.

Yours sincerely,

(Hemant Kulkarni)

Copy to: Audit (EMR) HRDG

Fwd: Requisition for change of Date of CSIR- Workshop Grant - regarding.

Dr.V.Sangeetha <vsangeetha@kongu.ac.in>

Mon 05-Jul-21 12:00 PM

To: HOD_Chemical Engineering <hod_chem@kongu.ac.in>

[Get Outlook for iOS](#)

From: Symposia Travel <symposia.travel@gmail.com>

Sent: Friday, July 2, 2021 12:48:33 PM

To: Dr.V.Sangeetha <vsangeetha@kongu.ac.in>

Subject: Re: FW: Requisition for change of Date of CSIR- Workshop Grant - regarding.

Thank you for writing the mail regarding your **rescheduling the event** to **August 06-07, 2021** instead of July 01-02,2021 for the reasons cited. However, this is one time change and no further change in date would be permitted subject to all other terms of sanction would remain same. Kindly enclose copy of this email while submitting claim bill after over the event.

Kind regards

TGSM unit,CSIR Cx

[<mailto:vsangeetha@kongu.ac.in>]

> Sent: Wednesday, June 30, 2021 11:50 AM

> To: Hemant Kulkarni

> Cc: rnd@kongu.ac.in

> Subject: Requisition for change of Date of CSIR- Workshop Grant -
> regarding.

>

>

>

> Respected Sir/Madam,

>

>

>

> I would like to extend my happiness to conduct the CSIR funding Workshop
> entitled "National workshop on Novel approaches in Food Processing and
> Waste
> Valorisation (NAFPWV)".

>

>

>

> With the reference to your mail Ref No. SYM/10641/21-HRD and dated
> 25.06.2020, from Council of Scientific and Industrial Research-workshop
> Grant on "National workshop on Novel approaches in Food Processing and
> Waste
> Valorisation (NAFPWV)" is planned to conduct on 01.07.2021 & 02.07.2021.

- > Due
- > to short span of time and still lockdown in Tamilnadu we would requesting
- > you to grant us permission for change of date for the National workshop on
- > Novel approaches in Food processing & Waste Valorization (NAFPWV) to
- > conduct
- > virtually during August 06-07, 2021 at Kongu Engineering college,
- > Perundurai.
- >
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- >
- > With regards
- >
- > Dr.V.Sangeetha
- >
- > Associate Professor
- >
- > Department of Chemical Engineering
- >
- > Kongu Engineering College
- >
- > Perundurai-638060
- >
- > Tamil Nadu, India
- >
- > Mobile:9942399016
- >
- >
- >

ABOUT THE DEPARTMENT

The Department of Food Technology was started in the academic year 2006-2007 and offers B.Tech., and M.Tech., degree programmes in Food Technology. This department is one of the recognized research centers by the Anna University, Chennai. The Department comprises of qualified staff members with good academic and industrial exposure. The Department has sound infrastructural facilities including separate laboratories like Biochemistry lab, Packaging lab, Food Analysis and Quality Control lab and Microbiology lab. The department focuses on imparting students with excellent technical knowledge to meet the needs of industries and research as well.

Department of Chemical Engineering was started in the academic year 1994 -1995 and offers B.Tech., and M.Tech., degree programmes in Chemical Engineering. This department is one of the recognized research centers by the Anna University, Chennai. The Department comprises of qualified staff members with good academic and industrial exposure. Well-equipped laboratories with advanced simulation softwares like ASPEN, HYSYS, HTRI and GPROMs cater to the interests of aspiring students. The department focuses on imparting students with excellent technical knowledge to meet the needs of industries and research as well. The department is accredited by NBA, New Delhi.

ABOUT THE COLLEGE

Kongu Engineering College (KEC) was established in the year 1984. Approved by AICTE, New Delhi and affiliated to Anna University, Chennai. The Institution has completed 36 years of dedicated and excellent service in the field of technical education. The Institution offers 14 UG, 19 PG and 16 Research programmes in Engineering, Applied Sciences and Management branches. The Institution is rated as 135th among all Engineering Colleges including IITs & NITs in India by MHRD & NIRF and listed among Band A institutions in Private and Self Financed Colleges by ARIIA-2020. The Institution has got NBA accreditation for all UG programme and is also ISO certified. The Technology Business Incubator was established in the Institution with sponsorship from DST.



CSIR

Sponsored

"National Workshop on Novel approaches in Food Processing and Waste Valorisation (NAFPWV)"

06/08/2021 to 07/08/2021

Organising Secretary

Dr. V. Sangeetha

Convener

Dr. A. Sudha

Mrs. N. Dhivya Bharathi

Department of Chemical Engineering & Food Technology,

Kongu Engineering College, Erode.

Contact No: +91-9942399016

Email Id: vsangeetha@kongu.ac.in

Venue

Chanakya Seminar Hall,

Department of Food Technology,

Kongu Engineering college,

Perundurai – 638060.

ABOUT THE WORKSHOP

Recent trend of lifestyle changes, as consumers demand products with a significant nutritional contribution, bioactive compounds, and good sensory properties, posed a great challenge toward food processing sector for the evolution of novel and innovative food processing techniques. The trend towards the use of "natural" ingredients, such as colors, flavors or preservatives has created the need for research into milder and more energy efficient but equally effective processing technologies.

The novel food processing technologies, such as HPP, PEF, Irradiation, ultrasonication and cold plasma which influence on consumer's health have been the major innovations in the field of processing technology. These novel techniques act by prolonging the shelf life, enhancing or maintaining the quality, and to regulate freshness of food product. Apart from this, Staggering amounts of food waste are being generated in Asia by means of agricultural processing, food transportation and storage, and human food consumption activities.

There must be an insight on the latest trends in food waste valorization in Asian countries such as India, Thailand, Singapore, Malaysia and Indonesia. Land filling, incineration, and composting are the first-generation food waste processing technologies. Thus the main objectives of this workshop are to provide basic knowledge of different new and innovative food processing techniques about their way of preservative action, effectiveness and suitability in various types of foods including waste valorization.

RESOURCE PERSONS

Sessions will be handled by eminent persons from Industry and reputed institutions

ELIGIBILITY

Students, Research Scholars and Faculty from AICTE Affiliated Engineering Colleges and Arts & Science Colleges.

REGISTRATION

Registration is free and it is limited to 50 participants. Applications will be selected on first-come first serve basis.

SCHEDULED DATES

Last Date for Receipt of Applications :
01.08.20201

Confirmation by Participants :
03.08.2021

REGISTRATION PROCEDURE

How to apply?

The interested participants shall register for the workshop through the link given below.

Link: <https://forms.gle/FT8VN76twGU4AuWG8>

TOPICS TO BE COVERED

1. Novel Approaches in Food processing Technology
2. Novel process technique for valorization of Agri- food waste
3. Cold Plasma: A novel approach for enhanced food quality and safety
4. Foodomics - A Novel approaches for Food Processing
5. Food waste Valorization – Scope and opportunities
6. Advances on food waste valorization – New horizons for sustainable society

ADDRESS FOR COMMUNICATION

The Organizer

National Workshop on Novel approaches in Food Processing and Waste Valorization (NAFPWV)

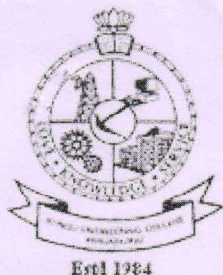
Department of Chemical Engineering
Kongu Engineering College
Perundurai, Erode - 638 060, Tamil Nadu.

Contact No:

Dr. V.Sangeetha : 9942399016
Dr. A.Sudha : 9486153011
Mrs. N.Dhivya Bharathi: 9025441585



Transform Yourself



KONGU ENGINEERING COLLEGE

(Autonomous)

PERUNDURAI, ERODE - 638 060, TAMILNADU

**Department of Food Technology and
Chemical Engineering**



website: www.kongu.ac.in

INVITATION

The Management, Principal, Faculty, Staff & Students of the Food Technology and chemical engineering cordially invites you for the

"INAUGURAL FUNCTION"

of

CSIR Sponsored National Workshop on Novel approaches in Food Processing and Waste Valorization (NAFPWV)

Mr.NIRMALKUMAR SHANMUGASUNDARAM

Product Development Executive

MTR foods private limited

has kindly consented to be the guest for the function

Thiru P.SACHITHANANDAN

Correspondent, KEC

has kindly consented to preside over the function.

&

Dr. V. BALUSAMY

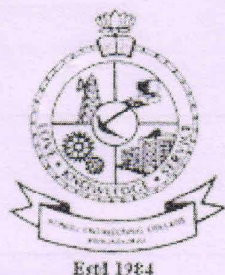
Principal, KEC

has agreed to felicitate the function

Date : 06.08.2021& 07.08.2021

Time : 9.30 am – 4.00 pm

Venue : Chanakya Seminar Hall, Food Technology Department



KONGU ENGINEERING COLLEGE

(Autonomous)

PERUNDURAI, ERODE - 638 060, TAMILNADU

Department of Food Technology and
Chemical Engineering



CSIR Sponsored National Workshop on Novel approaches in Food Processing and Waste Valorization (NAFPWV)

06.08.2021 - 07.08.2021

AGENDA

Date: 06.08.2021

09.00 AM to 09.30 AM	Registration Venue: Chanakya Seminar Hall, Department of Food Technology	
09.30 AM to 11.00 AM	Welcome address	Dr.V.Sangeetha Associate Professor Department of Chemical Engineering Kongu Engineering College Perundurai
	HoD's Address	Dr.K.Kannan Professor and Head Department of Chemical Engineering Kongu Engineering College Perundurai
	Presidential Address	Thiru P.Sachithanandan Correspondent Kongu Engineering College Perundurai
	Felicitation Address	Dr. V. Balusamy Principal Kongu Engineering College Perundurai
	Technical Session 1- 3D Food Printing – Principles and recent developments	Mr.Nirmalkumar Shanmugasundaram, Product Development Executive, MTR foods private limited, Bengaluru.
11.00 AM to 11.15 AM	Tea Break	
11.15 AM to 12.45 PM	Technical Session 2 – Food Waste Valorization – Scope and Oppourtunities	Mr. K.Kannan Assistant Engineer, Agricultural Engineering Department.
12.45 PM to 2.00 PM	Lunch	
2.00 PM to 03.30 PM	Technical Session 3 – Innovative Techniques in Food Processing	Dr.S.Kandasamy Professor, Department of Chemical Engineering, Kongu Engineering College, Perundurai.
3.30 PM to 4.00 PM	Tea Break	

Date: 07.08.2021

9.30 am to 11.00 am	Technical Session 4- Food Marketing -Consumer response to processed foods	Mr.D.V Nahulan Pranav, Senior Executive (Sales), GCMMF limited – AMUL Coimbatore.
11.00 AM to 11.15 AM	Tea Break	-
11.15 AM to 12.45 PM	Technical Session 5 – Agri-food waste: Present insight and future challenges	Dr. K.Kannan, Professor and Head. Department of Chemical Engineering Kongu Engineering College Perundurai
12.45 PM to 2.00 PM	Lunch	
2.00 PM to 3.30 PM	Feedback from participants	-
	Certificate Distribution	-
	Vote of Thanks	Dr.A.Sudha, Associate Professor, Department of Food Technology Kongu Engineering College Perundurai

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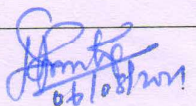
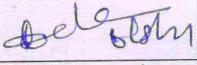
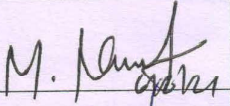

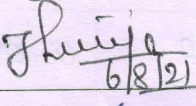
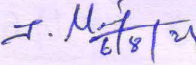
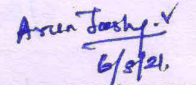
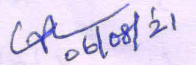
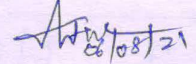
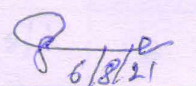
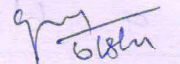

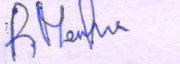
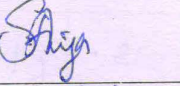

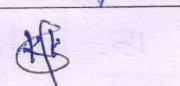
CSIR Sponsored

**National Workshop on
Novel approaches in Food Processing and
Waste Valorization (NAFPWV)**

06.08.2021 – 07.08.2021

REGISTRATION FORM

S.No	Date	Name	Designation	Name of institution	Signature
1.	06.08.2021	R. Ganeshwari	Assistant professor	DSIRT, Perambalur	R. Ganeshwari
2	06-08-2021	G. Monika	student	HICET, Coimbatore	G. Monika
3	6/8/2021	Dr. P.P. SELVI	Assistant Professor (SS.G)	Kongu Engineering college	P.P. Selvi
4	6/8/2021	A.S. SATHIHA	Assistant Professor	Kongu Engineering college	A.S. Sathitha
5	6/8/2021	Dr. Pagioli Aruna	Assistant professor	Kongu Engineering college	Dr. Pagioli Aruna
6.	6/8/2021	C.S. Manikaa	Assistant Professor	Kongu Engineering college	C.S. Manikaa
7	6/8/21	K. Marimuthu	Assistant Professor	Kongu Engineering college	K. Marimuthu
8.	6/8/21	D. Ranganatha	Assistant Professor	Kongu Engineering college	D. Ranganatha
9.	6/8/21	K. Kavivarshini	Assistant Professor	Kongu Engineering college	K. Kavivarshini
10	6/8/21	Manakumari R	Asst. Prof	KEC	Manakumari R
11.	6/8/21	V.N. Koushalya	Assistant Professor (Chemistry)	Chemistry, KEC	V.N. Koushalya
12.	6/8/21	R. Tamilisai	Assistant Professor	Chemistry, KEC	R. Tamilisai
13.	6/8/21	Dr. K. Manjula Rani	Associate Professor	Chemistry KEC	Dr. K. Manjula Rani
14	6/8/21	Dr. A.S. PERIASAMY MANIKANDAN	ASSOCIATE PROFESSOR	Chemical Engg KEC	Dr. A.S. PERIASAMY MANIKANDAN
15.	6/8/21	Dr. D. NESAKUMAR	ASSISTANT PROFESSOR	CHEMICAL ENGINEERING, KEC	Dr. D. NESAKUMAR
16.	6/8/21	Dr. K. Senthil Kumar	Associate Prof	Chemical Engg Kongu Engg	Dr. K. Senthil Kumar

S.No	Date	Name	Designation	Name of institution	Signature
18.	06.08.2021	Dr. D. REVATHI	Assistant Professor (Sr.G.)	Kongu Engineering College, Perundurai	
19.	06.08.2021	K. Kalanani	Assistant Professor (Sr.G.)	KEC, Perundurai	
20.	06/08/2021	M. Naveen Kumar	Research scholar/chem	KEC, Perundurai	
21	6/8/2021	T. SATHISH	ASSISTANT PROFESSOR	KEC, PERUNDURAI	
22	06/08/2021	LAKSHMI PRIYA.J	ASSISTANT PROFESSOR	KEC, PERUNDURAI	
23	06.08.2021	JONY BLESSING MANOJ. J	Assistant Professor	KEC, Perundurai	
24.	06.08.2021	Arun Joshy. V	Assistant Professor (Food Tech)	KEC, Perundurai	
25	06.08.2021	Dr. C. GOMADURAI	Associate Professor	Kongu Engg. College	
26	06.08.2021	S. MOTHIL	Assistant Professor	Kongu Engineering College	
27	06.08.2021	S. Praveen	Assistant Professor	Kongu Engg College	
28.	06.08.2021	G. MUGATH HUSEEN	ASSISTANT PROFESSOR	KONGU ENGG COLLEGE	
29.	06.08.2021	R. Sathish Ram.	Assistant Professor	Kongu Engg. College	
30	06/08/2021	R. Menaka	Assistant professor	BIT, Sathy	
31	06/08/21	S. Anuja	Assistant professor	BIT, sathy	
32	06/08/21	NAGESHWARI	ASSISTANT PROFESSOR	Hindustan, Coimbatore	
33	06.08.21	K. KRISTINAVENI	Assistant Professor	KEC, Perundurai	

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KONGU ENGINEERING COLLEGE, PERUNDURAI, ERODE 638 060

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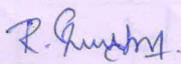
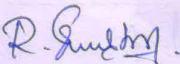
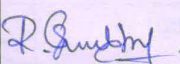
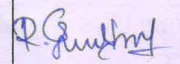
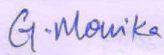
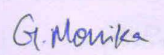
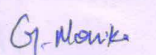
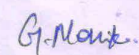
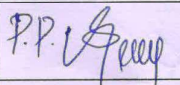
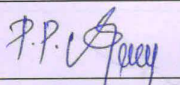
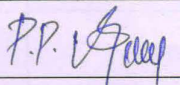
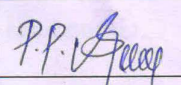




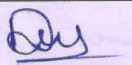
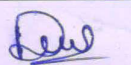
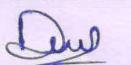
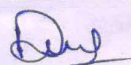






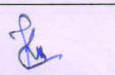
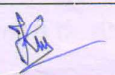
















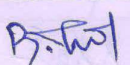
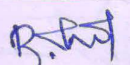
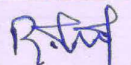

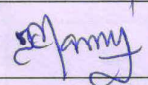
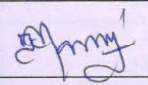
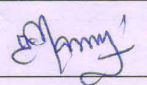
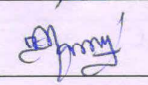
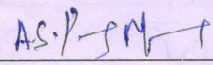
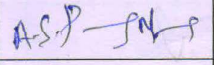
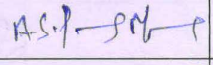
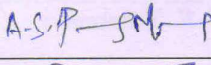




CSIR Sponsored

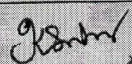
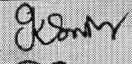
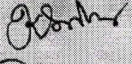
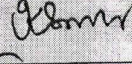
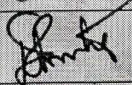
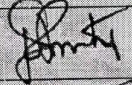
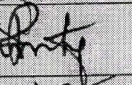
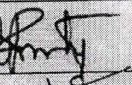
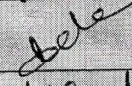
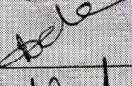
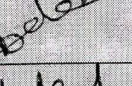
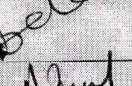
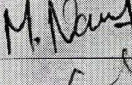
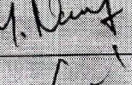
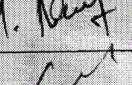
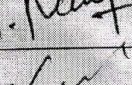

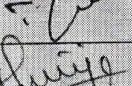
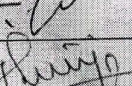
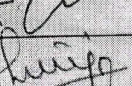
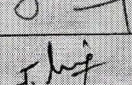



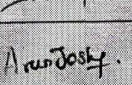
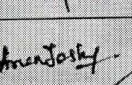
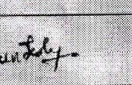
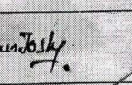
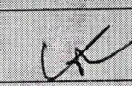

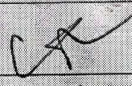
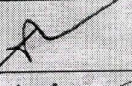
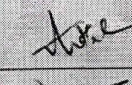
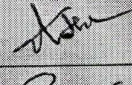
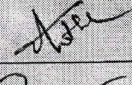

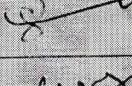
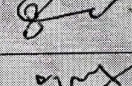


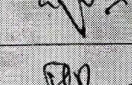
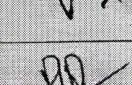
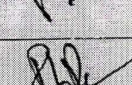
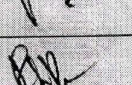
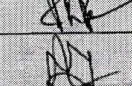
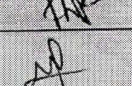
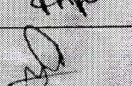
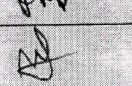
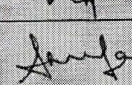
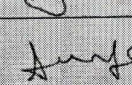
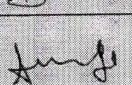
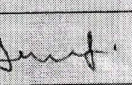
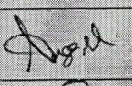
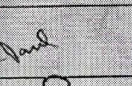
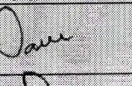
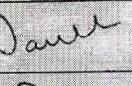

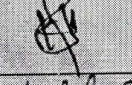
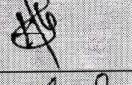
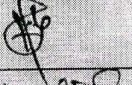
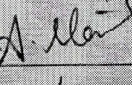
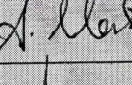
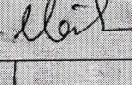
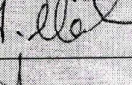
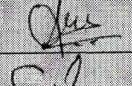
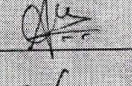
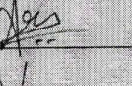
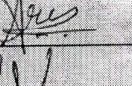
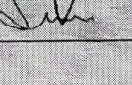
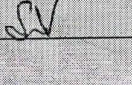










National Workshop on

**Novel approaches in Food Processing and
Waste Valorization (NAFPWV)**

06.08.2021 – 07.08.2021

Attendance List

S.No	Name	06.08.2021		07.08.2021	
		FN	AN	FN	AN
1.	R.Ganeshwari				
2.	G. Monika				
3.	Dr. P. P Selvi				
4.	A.S. Sajitha				
5.	Dr. Pagidi Aruna				
6.	C. S. Maurikaa				
7.	K. Manonmani				
8.	A. Sangeetha				
9.	K. Kavivarshini				
10.	R. Meenakumari				
11.	V.N. Kowshalya				
12.	R. Tamilisai				
13.	Dr.K. Manjula Rani				
14.	Dr.A.S.Periasamy Manikandan				
15.	Dr.D.Nesakumar				

16.	Dr.K.Senthil Kumar				
17.	D.Revathi				
18.	K.Kalaivani				
19.	M. Naveenkumar				
20.	T.Sathish				
21.	J. Lakshmipriya				
22.	J. Jony Blessing Manoj				
23.	V.Arun Joshy				
24.	Dr.C.Gomadurai				
25.	S.Mothil				
26.	S.Pranav				
27.	G.Mugaishudeen				
28.	R Sathish Raam				
29.	R. Menaha				
30.	S. Anuja				
31.	Nageswari				
32.	K.Krishnaveni				
33.	A. Manju Sri				
34.	E.C.K. Arun				
35.	S. Vaishnavi				
36.	Dr.P.S.Raghavendran				







KONGU ENGINEERING COLLEGE

(Autonomous)

PERUNDURAI ERODE 638 060 TAMILNADU INDIA



Department of Chemical Engineering
&
Department of Food Technology



CERTIFICATE

This is to certify that _____ has

attended CSIR Sponsored National Workshop on **Novel Approaches in Food Processing and Waste**

Valorisation (NAFPWV) from 06.08.2021 to 07.08.2021 at Kongu Engineering College, Perundurai, Erode.

Staff Co-ordinator

HOD

Principal





COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH
HUMAN RESOURCE DEVELOPMENT GROUP
CSIR COMPLEX, OPP INSTITUTE OF HOTEL MANAGEMENT
LIBRARY AVENUE, PUSA, NEW DELHI- 110012, INDIA
Email: tgsm[at]csirhrdg[dot]res[dot]in
Phone:0112584107

Symposia Grant Scheme for Organising Scientific Events (Symposia/
Seminars / Conferences/ workshops, etc. within India

GRANT-IN-AID BILL

(To be filled by the Applicant and submitted in duplicate)

Date: 23.08.2021

To: Head, HRD Group, CSIR Complex, Pusa, New Delhi-110012
Reference CSIR Sanction No: SYM/10641/21--HRD

- Name of the Organisation under whose auspices the Scientific Event was organized:
Kongu Engineering College
- Title/Name of the Scientific Event : National Workshop on Novel approaches in food processing and waste valorisation (NAFPWV)
- Venue of the Event (Address) Chanakya Seminar Hall, Department of Food Technology, Kongu Engineering College
- Period:

From			To		
Date	Month	Year	Date	Month	Year
06	08	2021	07	08	2021

- Brief report (highlights) of the Scientific Event (Less than 1000 words- Attach separate sheet)

Annexure I

- Grant Sanctioned: Rs. 25000 (Rupees Twenty Five Thousand)
 - Total Actual Expenditure: Rs. 25000 (Rupees Twenty Five Thousand)
 - Actual expenditure** as per Attached Audited Statement of Expenditure for claim from CSIR: Rs. 25000 (Rupees Twenty Five Thousand)

- Pl tick mark (✓) the name of the authority to whom the NEFT payment is to be made:

S.No.	Authority	Mark ✓
i.	Director	
ii.	Registrar	
iii.	Dean	
iv.	Finance Officer	
v.	Medical Superintendent	
vi.	Principal	✓
vii.	Any Other Authority designated by your Organization/Institute (Kindly specify _____)	

Note : Grant will be released in the account of Society/Institution/Organization etc only

Certified that the amount claimed in this bill was utilized for the purpose for which it has been sanctioned, and the Audited Statement of Expenditure is enclosed as per requirement.

Organizer:

Signature V. Sangeetha
Name: Dr. V. SANGEETHA, M. Tech., Ph.D.,
Designation: Associate Professor,
Address: Department of Chemical Engineering,
City Perundurai State Tamil Nadu
Mob No. 938060XXXXXX
Email ID Kongu Engineering College,
Seal / Stamp Perundurai-638060, Erode
Tamil Nadu, INDIA.

Head of the Organisation (Place of Event)

Signature Dr. V. Balusamy
Name: Dr. V. BALUSAMY
Designation: PRINCIPAL
Address: KONGU ENGINEERING COLLEGE
City THOPPUPALAYAM (PO) State ERODE
Mob No. PERUNDURAI (TK) ERODE-638060
Email ID TAMILNADU, INDIA
Seal / Stamp

TO BE FILLED BY CSIR-EMR

Budget Head- EMR (Misc.) P81-104

It is certified that no AC /UC is pending from the Organization/institute in connection with earlier such grants released to them.

Pay: Rs: _____ (Rupees _____)
Name of the authority to whom the NEFT payment is to be made: Director/Registrar/
Dean/Medical Superintendent/ Principal/Finance Officer / _____
as per NEFT format enclosed.

Deputy/Under Secretary /DDO

TO BE FILLED BY CSIR-Audit (EMR III)

MBR No. _____ Dated: _____ Pay Rs. _____ (Rupees: _____)

Dealing Assistant

SO (F&A)/F&AO/DyFA

Rs _____ paid vide Cheque No _____ Dated _____ through NEFT/RTGS



**COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH
HUMAN RESOURCE DEVELOPMENT GROUP
CSIR COMPLEX, OPP INSTITUTE OF HOTEL MANAGEMENT
LIBRARY AVENUE, PUSA, NEW DELHI- 110012, INDIA**

Email: tgsm[at]csirhrdg[dot]res[dot]in

Phone: 0112584107

**Symposia Grant Scheme for Organising Scientific Events (Symposia/
Seminars / Conferences/ workshops, etc. within India**

AUDITED STATEMENT OF EXPENDITURE To be filled by the applicant in duplicate

Date: 23.08.2021

Reference: CSIR Sanction No: SYM/10641/21-HRD

1. Name of the Society / Organisation under whose auspices the Event was organized:

Kongu Engineering College

2 Title/Name of the Event:

National Workshop on Novel approaches in food processing and waste valorisation (NAFPWV)

3. Period:

From			To		
Date	Month	Year	Date	Month	Year
06	08	2021	07	08	2021

4. Grant Sanctioned: Rs. 25000 (Rupees Twenty Five Thousand)

5. Certified that out of Total Expenditure of Rs. 25000 (Rupees Twenty Five Thousand)

CSIR Grant of Rs. 25000 (Rupees Twenty Five Thousand) has been utilized as per the details given below:

S. No.	Budget Head	Amount (Rs)
i	Travel expenses for c. Senior scientists: d. Young Scientists :	14000
ii	Registration Fee Waiver c. Senior scientists: d. Young Scientists :	-
iii	Promotion (web site, brochures, others)	3000
iv	Secretarial assistance	2000
v	Local Hospitality	6000
vi	Venue Charges	-
TOTAL		25000

Certified by: (PL ENSURE ALL SIGNATURES ARE ON THIS PAGE ONLY)

Organizer:

**Finance Officer/
Chartered Accountant**

Head of Organisation

Signature

Name:

Designation:

Mob No. SANGEETHA, M.Tech, Ph.D.

Email ID Associate Professor,

Seal / Stamp Department of Chemical Engineering,

Kongu Engineering College,
Perundurai-638060, Erode
Tamilnadu, INDIA.

Signature

Name:

UDIN : 21026921AAAAFM6398

Mob No. VELUMANI, B.Sc., F

Email ID Chartered Accountant

Seal / Stamp 33/1, Annamalai Layout,

Nalli Hospital Road, ERODE - 638011,
M.No: 026921.

Signature

Name

Designation

Mob No.

Email ID

Seal / Stamp

Dr. V. BALUSAMY

PRINCIPAL

KONGU ENGINEERING COLLEGE

THOPPUPALAYAM (PO)

PERUNDURAI (TK) ERODE-638060

TAMILNADU, INDIA

18/8-21

25/8/21

KONGU ENGINEERING COLLEGE, PERUNDURAI, ERODE 638 060

(Autonomous)

CSIR Sponsored

National Workshop on

Novel approaches in Food Processing and

Waste Valorization (NAFPWV)

06.08.2021 – 07.08.2021

Technical Session 1- 3D Food Printing – Principles and recent developments

Mr.Nirmalkumar shanmugasundaram,

Product Development Executive,

MTR foods private limited.

3D food printing is the process of manufacturing food products using a variety of additive manufacturing techniques. Most commonly, food grade syringes hold the printing material, which is then deposited through a food grade nozzle layer by layer. The most advanced 3D food printers have pre-loaded recipes on board and also allow the user to remotely design their food on their computers, phones or some device. The food can be customized in shape, color, texture, flavor or nutrition, which makes it very useful in various fields such as space exploration and healthcare. There are three general areas that impact precise and accurate food printing: materials/ingredients (viscosity, powder size), process parameters (nozzle diameter, printing speed, printing distance), and post-processing methods (baking, microwaving, frying). Robots and software's have been significantly improving our daily lives by rendering us much convenience. And 3D printing is a typical example, for it is going to usher in a new era of localized manufacturing that is actually based on digital fabrication by layer-by-layer deposition in three-dimensional space. In terms of food industry, the revolution that three-dimensional printing technologies is bringing to food manufacturing is convenience of low-cost customized fabrication and even precise nutrition control.

Technical Session 2 – Food Waste Valorization – Scope and Opportunities

Mr. K.Kannan

Assistant Engineer,

Agricultural Engineering Department.

The world is confronted with the depletion of natural resources due to their unsustainable use, increased global competitiveness, increasing population and other environmental and economic challenges. Under the European 2020 growth strategy launched in 2010, Europe has set itself the goal of shifting from linear to circular models of production and consumption. In this context, food waste management poses a great challenge. This focusses on the possible destinations for

food waste, specifically, on the most sustainable practices that turn waste into valuable resources. Particular attention is devoted to the potential offered by fast-growing sectors such as the bioeconomy, which is contributing to increased energy and materials production with reduced environmental impact, at the same time creating new job opportunities. A systematic methodology to identify types of food waste through a nine-stage categorization is used in conjunction with a version of the waste hierarchy applied to food products. For each type of food waste characterized, a set of waste management alternatives are suggested in order to minimize environmental impacts and maximize social and economic benefits. This decision-support process is demonstrated for two case studies from the UK food manufacturing sector. As a result, types of food waste which could be managed in a more sustainable manner are identified and recommendations are given. The applicability of the categorization process for industrial food waste management is discussed.

Technical Session 3 –Innovative Techniques in Food Processing

Dr.S.Kandasamy

Professor,
Department of Chemical Engineering,
Kongu Engineering College,
Perundurai.

The food industry is in the process of revolutionary change with new processing technologies that allow foods to keep possession of superior quality without refrigeration. It is fact that not only the shelf life but also the quality of food is important to consumers led to the concept of preserving foods using preservation methods. Therefore, alternative or novel food processing technologies are being explored and implemented such as Microwave heating, High Pressure Processing (HPP), Ohmic heating, Ozone processing, Atmospheric Pressure Plasma (APP), Ultrasonic. It is important to understand that no single technology can replace the shelf-stable capabilities of either classical retorting or aseptic processing. Nowadays, many of the innovative thermal and non-thermal processing technologies can be used either additively or synergistically to build “hurdles” in working together with an objective to produce superior products with minimize heat-induced damages. The importance of novel processing techniques are to improve microbial safety and nutritional quality, to improve physicalchemical properties of foods by minimizing process intensities for sensory evaluation or technological function, to reduce operating cost requirements, to reduce waste load, to increase production and process efficiency.

Technical Session 4- Foodomics –A Novel approaches for food processing

Mr.T.V Nagulan Pranav,
Senior Executive (Sales),
GCMMF limited - AMUL

Foodomics is being consolidated in food science through the application and integration of a variety of omics tools (*e.g.*, genomics, transcriptomics, proteomics, metabolomics) together with chemometrics and bioinformatics. Foodomics can greatly improve our understanding of the complex food–diet–individual interplay, involving different food science and nutrition research areas dealing with food composition, food safety, quality and traceability issues, as well as the effects of food on an individual's health or illness status. Foodomics, is ‘a discipline that studies the food and nutrition domains through the application and integration of advanced omics technologies to improve consumer's well-being, health, and confidence. Foodomics is, therefore, a broad discipline that integrates all the multidisciplinary approaches in modern food science and nutrition (*e.g.* nutrigenomics, nutrigenetics, microbiomics, toxicogenomics, nutritranscriptomics, nutriproteomics, nutrimetabolomics, *etc.*). Considering the complexity of the foodome, defined as ‘the collection of all compounds present in any investigated food sample and/or in any biological system interacting with the investigated food at a given time, the implementation of omics platforms, such as transcriptomics, proteomics and metabolomics, is essential to conveniently characterize the mentioned foodome. The combination of these techniques produces complementary analytical information, thus allowing a wider foodome coverage at different molecular expression levels (transcripts, proteins and metabolites).

Technical Session 5 – Agri- food waste: Present insight and future challenges

Dr. K.Kannan,
Professor and Head.
Department of Chemical Engineering
Kongu Engineering College Perundurai

Sustainable utilization of agrifood wastes and byproducts for producing value added products (for cosmetic, pharmaceutical or food industrial applications) provides an opportunity for earning additional income for the dependent industrial sector. Besides, effective valorisation of wastes/byproducts can efficiently help in reducing environmental stress by decreasing unwarranted pollution. The major focus is to provide comprehensive information on valorisation of agrifood wastes and byproducts with focus laid on bioactive compounds and bioactivity. This,

covers the bioactives identified from wastes and byproducts of plants (fruits, exotic fruits, vegetables and seeds), animals (dairy and meat) and marine (fish, shellfish seaweeds) resources. It is evident that agrifood wastes and byproducts presents wide opportunity for isolation of natural bioactive compounds with possible potential applications in the food, pharma and cosmeceutical industries. Fibre extracted from wastes and by products can find potential applications in food application as a low-caloric bulking agent useful as a flour or fat replacer or to improve water and oil absorption and other functional properties and viscosity or as a natural ingredient to provide oxidative stability and enhance the shelf life of foods. Use of wastes as source of prebiotic oligosaccharides will be an interesting arena to be explored. Utilizing agri- food wastes and byproducts (rich in pectin, fibre, lignin, cellulose and hemi cellulose) for producing novel biodegradable bioplastics is another arena that needs to be investigated. Finally, improving and optimization of the isolation, extraction, processing and production processes of agrifood wastes and byproducts via a sustainable approach is the need of the hour.

V. Jeyaraj





Perundurai, Erode, 638052, TN, India

Latitude	Longitude
11°16'21"N	77°36'26"E
Local 09:49:37 AM	Altitude 266.02 meters
GMT 04:19:37 AM	Friday, 08/06/2021





COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH

Human Resource Development Group

CSIR Complex, Library Avenue, Pusa, New Delhi 110 012

Tel : 011 2584 1037

Email: symposia.travel@gmail.com , web <http://csirhrdg.res.in>

Hemant Kulkarni
Senior Principal Scientist

Ref No. SYM/10662/21-HRD
October 07, 2021

Dr P P Selvi
Assistant Professor, Dept. of Chemical Engineering
Kongu Engineering College
Perundurai, Erode - 638 060 Tamil Nadu

SUBJECT: Green House Gas Emissions & Carbon Dioxide Sequestration By Agroforestry For The Sustainable Future during Nov 05-05,2021 at Kongu Engineering College, Erode

Dear Dr Selvi

With reference to your application on the above subject, we are happy to inform you that Director General, CSIR has been pleased to sanction a grant of **Rs.15000/- (Rupees Fifteen Thousand Only)** subject to the following conditions:

1. The grant received from CSIR should be duly acknowledged by email along with a certificate that the grant would be specifically utilized for the purpose for which it has been sanctioned.
2. The grant may be reimbursed within four months from the date of Conference/Seminar/Workshop etc. is over by filling-in the Grant-in-Aid Bill Form in duplicate duly signed and rubber stamped by the concerned officials, indicating clearly the designation of the official along with Audited Statement of Expenditure for release of grant. Current Proforma for Grant-in-aid bill, Audited Statement of Expenditure and NEFT are available on our website <http://csirhrdg.res.in/Home/Index/1/InPage/53/14>. If any Utilization Certificates of Previous Grant for symposia (as per Col.No. 15 of the Application Performa) is not submitted till date, please attach copies of Utilization Certificates also. Any claim received beyond 4 months will be entertained only in exceptional cases subject to submission of reasons for delay, duly forwarded through Head of the Organization. In no case, the claim will be entertained after 6 months. All the pages of above documents should be self attested by the organizer.
3. Invitation cards should be sent to the Director General, CSIR and Head, HRDG. CSIR may nominate three scientists for the above event and registration fee should not be charged from them. In case of nomination, the Head, HRDG or the undersigned would issue a letter with a copy to the nominee(s).
4. Softcopy (preferably in Pen Drive/CD/ DVD in PDF format) of the full paper proceedings of above event should be sent to the undersigned.
5. An overall activity report by the Convener / Organizing Secretary should be made available by email to us with regard to outcome of the gathering, the recommendations and plan of action for future. The names, addresses & email IDs of the participants / delegates should also be sent immediately after the event by email.

Yours sincerely,

(Hemant Kulkarni)

Copy to: Audit (EMR) HRDG



Kongu Engineering College
Perundurai, Erode – 638 060, Tamilnadu



DEPARTMENT OF CHEMICAL ENGINEERING



Council of Scientific & Industrial Research (CSIR), New Delhi

Sponsored

National Seminar on

‘Greenhouse gas emissions and Carbon dioxide sequestration by Agroforestry systems for sustainable future’

19th November 2021

COMPLETION REPORT OF THE SEMINAR

Introduction

The Green House Gasses (carbon-di-oxide) sequestration is the urgent need to protect the atmosphere and avoid global warming and hence prevent climatic changes. CO₂ emissions to air from point sources can be controlled by capturing CO₂ as high pressure fluid and shipped to places where they are injected into pure space at depths below portable waters. Advanced future studies needed for technology development for recycle and reuse from energy installations are included in the deliberations. This seminar provides an opportunity to discuss about the possible use of the various innovative green technologies and advanced methods will certainly help the society and the world in the era of new product development with the minimum impact on atmosphere.

Renowned experts who have rich and adequate teaching and research experience delivered the lectures well. This seminar is beneficial to faculty, industrial people, research, PG and UG students, from Chemical Engineering, Biotechnology, Environmental Engineering, Chemistry and biotechnology, etc. disciplines as a potential and knowledge tool in their research activities and to

motivate the students to do innovative projects which will be beneficial to the society. This seminar aims to provide knowledge about various available Innovative Green Technologies for Sequestration of green house gases and strategies with the minimum impact on atmosphere, climate change etc.

Objectives of the Programme

The aim of the seminar is to analyse the technologies available to achieve reduction in green house emissions at an affordable prize and also to provide a comprehensive and structured exposure about knowledge on various available Innovative Green Technologies for Sequestration of green house gases and also to discuss about the strategies for producing products with the minimum impact on atmosphere. Besides, the objectives are

1. To create awareness about the effects of sequestration of green house gases among the students, faculty, etc.
2. To Learn about “Low-Carbon Agriculture Plan”
3. To know about agroforestry and biochar to offset climate change
4. To discuss about soil organic carbon sequestration
5. To elaborate agroforestry for ecosystem services and environmental benefits
6. To explain advancements of Green house gases sequestration techniques and reduction of Carbon footprint generated by animal production
7. To discuss about application of Green Technology concepts towards sustainable development and application of Agrosilvopastoral and Silvopastoral systems as agroforestry system to mitigate GHG.
8. Research challenges in the agroforestry system to sequestration techniques

Programme Schedule

The programme is designed in such a way that the participant should able to know about Carbon capture and Sequestration techniques, Strategy for minimization of CO₂ emissions, Climate Change Regulatory Process, techniques for preventing climate change and tsunami etc. The detailed Programme schedule is enclosed as Annexure I.

Execution of the Programme

With the above aim and objectives in mind, we had applied to Council of Scientific and Industrial Research (CSIR), New Delhi in the academic year 2021-22. The Council has approved the Programme and sanctioned Rs. 15,000/- (Rupees Fifteen thousand only) to conduct the programme.

The Seminar details in the form of Brochure printed and were sent to Engineering and Polytechnics Colleges throughout the country, out of which more applicants had responded to participate in the seminar. Finally 45 people have confirmed their participation to attend their programme.

Resource Persons

The resource persons who had worked on CO₂ sequestration, environmental engineering, Carbon capture etc. from renowned institutions are invited for the seminar.

The programme was inaugurated by Dr. Udhaya Bhaskar Reddy, Department of Chemical Engineering, Amritha University, Coimbatore on 19.11.2021 in Chanakya Seminar Hall of Kongu Engineering College. Dr.K.Kannan, HoD of Chemical Engineering department preside over the function and delivered the presidential address. Dr. P.P.Selvi, Co-Ordinator, welcomed the gathering and presented a report about the program. The chief guest delivered the inaugural address.

Dr. K.Senthilkumar, Associate Professor/Chemical Engineering proposed the vote of thanks. The program was attended by all the Participants, along with other invitees and Professors. Some Important Photographs of inauguration and rest of the program are enclosed.

Some of the participants responded with their feedbacks highlighting the pros and cons of the programme. All feedbacks were found to be satisfactory. Certificates to the participants were distributed by the chief guest.

ORGANIZER



Kongu Engineering College
Perundurai, Erode – 638 060, Tamilnadu



DEPARTMENT OF CHEMICAL ENGINEERING

National Seminar on

‘Greenhouse gas emissions and Carbon dioxide sequestration by Agroforestry systems for sustainable future’



Sponsored by
Council of Scientific & Industrial Research (CSIR), New Delhi

Programme Schedule(Annexure I)

Date: 19th November 2021

Venue: Chanakya Seminar Hall

<i>Time</i>	<i>Programme</i>
08.45 AM to 09.30 AM	INAGURATION
09.30 AM to 11.00 AM	Presentation by Dr.R.Udaya Baskar Reddy
11.00 AM to 11.15 AM	Presentation by Dr.K.Senthilkumar
12.15PM to 01.15 PM	Presentation by Dr.P.P.Selvi
01.15 PM to 02.00 PM	Lunch
02.00 PM to 03.30 PM	Presentation by Dr.R.Udaya Baskar Reddy
03.30 PM to 03.45 PM	Tea Break
03.45 PM to 04.30 PM	Certificate Distribution

Important Snap Shots



Dignitaries on the stage during Inauguration of CSIR sponsored National Seminar
Felicitation by Dr.K.Kannan



Chief Guest Inaugural address



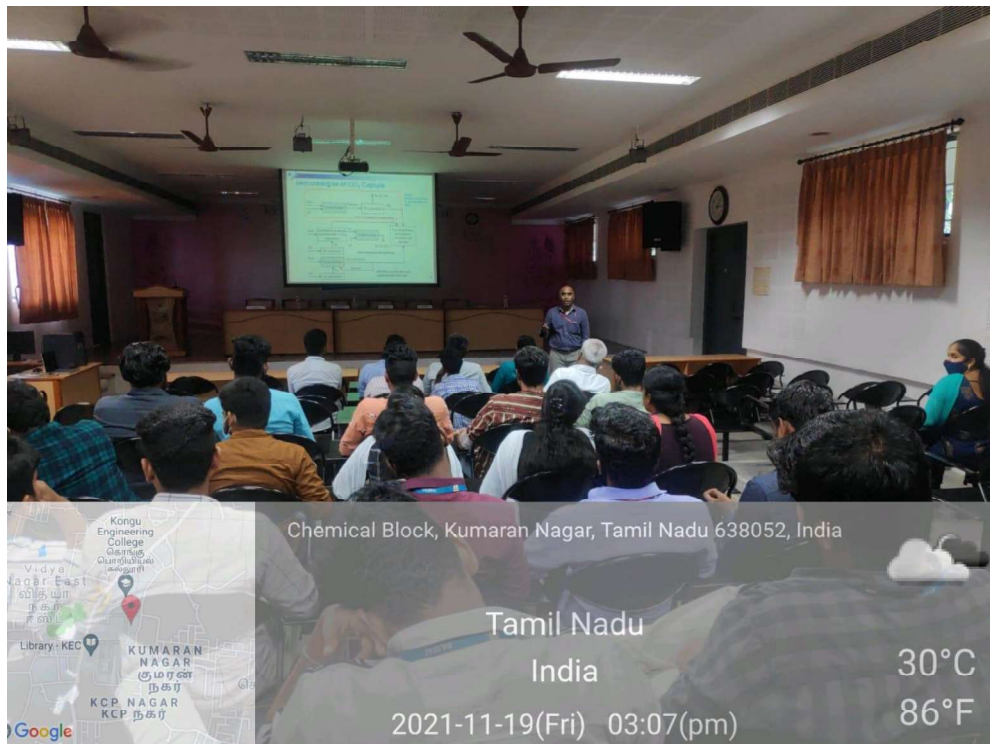
Presentation by Dr. R. Udhaya Baskar Reddy



Presentation by Dr. K. Senthilkumar



Presentation by Dr.P.P.Selvi



Presentation by Dr. R. Udhaya Baskar Reddy

ABOUT THE INSTITUTE

Kongu Engineering College (KEC) was established in the year 1984. Approved by AICTE, New Delhi and affiliated to Anna University, Chennai. The Institution has completed 37 years of dedicated and excellent service in the field of technical education. The Institution offers 17 UG, 15 PG and 16 Research programmes in Engineering, Applied Sciences and Management branches. The Institution is one among the best self-financing engineering colleges imparting high quality technical education in Tamil Nadu and is rated 3rd among all self-financing colleges in India and 46th among all Engineering Colleges including IITs & NITs in India by MHRD & NIRF. The Institution has got NBA accreditation for all eligible UG programmes and is also ISO certified. It has also got the Best Engineering College award and the Best Principal Award. The Technology Business Incubator was established in the Institution with sponsorship from DST.

ABOUT CHEMICAL ENGG. DEPARTMENT

The Department of Chemical Engineering was started in the academic year 1994 -1995 and offers B.Tech., and M.Tech., Degree programmes in Chemical Engineering. This department is one of the recognized research centres by the Anna University, Chennai. The department comprises of qualified staff members with good academic and industrial exposure. Well-equipped laboratories containing equipments like Fourier Transform Infrared, Atomic Absorption Spectrometry and with advanced simulation software's like ASPEN, HYSYS, HTRI, gPROM and ProSIM's cater to the interests of aspiring students. The department focuses on imparting students with excellent technical knowledge to meet the needs of industries and research as well. The department received research grants from various funding agencies like DST, AICTE, TNSCST, etc.

ABOUT THE PROGRAMME

The recent changes in the climatic conditions of the earth are because of the emission of greenhouse gases into the atmosphere. Usually the CO₂ present in the atmosphere is utilized by the green plants. Research has found that the increase in CO₂ content rises global warming. At higher temperature there is a decrease in absorption of CO₂ by the plants. One is to support the reduction in emission and other is to restrict the growth of the nations that increases the emission of CO₂. Agrosilvopastoral and Silvopastoral systems can increase carbon sequestration, offset greenhouse gas (GHG) emissions and reduce the carbon footprint generated by animal production. The increase in growth of renewable and low carbon technologies account to strengthen the reduction in emission. Recent technological development should monitor the climatic impacts and drive the CO₂ emission to zero by 2050. Agroforestry systems sequester CO₂ from the atmosphere and can help the GHG emission-reduction policy of the government. This program will prove to be beneficial for scientists, faculty, industrialists, researchers, strategists and other professionals in the field of Engineering and Technology.

At the end of the programme, the participants shall be able to understand the following aspects;

- Learn about "Low-Carbon Agriculture Plan"
- Agroforestry and biochar to offset climate change
- Soil organic carbon sequestration
- Agroforestry for ecosystem services and environmental benefits
- Advancements of Green house gases sequestration techniques and reduction of Carbon footprint generated by animal production
- Application of Green Technology concepts towards sustainable development
- Application of Agrosilvopastoral and Silvopastoral systems as agroforestry system to mitigate GHG.
- Research challenges in the agroforestry system to sequestration techniques



**Department of Chemical Engineering,
Kongu Engineering College,
Perundurai, Erode Dt. - 638 060, Tamil Nadu**

**National Seminar on
"Greenhouse gas emissions and Carbon
dioxide sequestration by Agroforestry systems
for sustainable future"
Sponsored by
Council of Scientific & Industrial Research
(CSIR), New Delhi**



November 19th, 2021

REGISTRATION FORM

Name: Dr./Mr/Ms: _____
(Capital letters, as desired in certificate)

Designation : _____

Department : _____

Organization : _____

Name & address : _____

E mail : _____

Mobile no : _____

Signature : _____

Signature of HoD: _____

DECLARATION BY THE APPLICANT

The above mentioned information is true to the best of my knowledge and belief. I agree to abide by the rules and regulations governing the seminar. If I am selected I shall attend the course for the entire duration.

Place:

Date: Signature

SPONSORSHIP CERTIFICATE

Mr/Ms/Dr..... is an employee of our institute/organisation and is sponsored to attend **National Seminar On "Greenhouse gas emissions and carbon dioxide sequestration by agro-forestry systems for sustainable future"**, if selected.

Place:

Date: Signature of the Authority
with Office Seal

- Application form can be downloaded from our college website
- Scanned copy of the filled –in Registration form can be uploaded in the Google form link

<https://forms.gle/wjyeeEUogGB4sHW7>

For further details:

The Organising Secretaries,

E mail: sevi.chem@kongu.edu,

senthilkumar.chem@kongu.edu

Contact No. : 9842308431, 98428 44880

Organising Secretaries:

Dr. P.P. Selvi

Assistant Professor (Sr. G.) /Chemical Engineering

Dr. K. Senthilkumar

Associate Professor/Chemical Engineering

Resource Persons:

The various sessions will be handled by speakers from eminent scientists and renowned professors from various R and D laboratories and renowned academic institutions in India.

Eligible Participants:

UG and PG Students, Research Scholars, Faculty from Engineering & Polytechnic colleges, Industrial people are eligible to attend the programme.

Registration:

NO REGISTRATION FEE. As seats are limited to 40, early registration is recommended. **NO SPOT REGISTRATION is allowed.** Participants are requested to make their own accommodation.

Important Dates:

Last Date for Registration	: 08.11.2021
Intimation of the selected participant	: 11.11.2021
Confirmation by participants	: 13.11.2021



KONGU ENGINEERING COLLEGE

Perundurai, Erode-638 060,
Tamil Nadu

National Seminar on "Greenhouse gas emissions and Carbon sequestration by Agro-forestry systems for sustainable future"

Sponsored by



Council of Scientific & Industrial Research (CSIR), New Delhi

November 19th, 2021

ORGANIZED BY

**Department of
Chemical Engineering**

KONGU ENGINEERING COLLEGE

Perundurai, Erode-638 060,
Tamil Nadu



Chemical Block, Kumaran Nagar, Tamil Nadu 638052, India

Tamil Nadu
India

2021-11-19(Fri) 01:10(pm)



31°C

88°F



Chemical Block, Kumaran Nagar, Tamil Nadu 638052, India

Tamil Nadu
India

2021-11-19(Fri) 03:07(pm)



30°C
86°F



Chemical Block, Kumaran Nagar, Tamil Nadu 638052, India

Tamil Nadu
India

2021-11-19(Fri) 03:07(pm)

30°C
86°F

KONGU ENGINEERING COLLEGE, PERUNDURAI - 638060

(Autonomous)

DEPARTMENT OF CHEMICAL ENGINEERING

CISR Sponsored


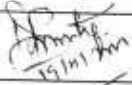
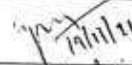
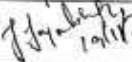
One Day National Seminar on

“Greenhouse gas emissions and Carbon dioxide sequestration by Agro forestry systems for sustainable future”

REGISTRATION DETAILS

Date: 19.11.2021

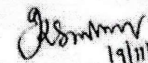
Venue: Chanakya Seminar Hall

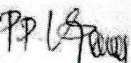
S.No	NAME OF THE PARTICIPANT	DESIGNATION/DEPARTMENT	COLLEGE NAME	MOBILE NUMBER	EMAIL ID	SIGNATURE
1	Deepak J	Student / Chemical Engineering	KPR Institute of Engineering and Technology	9994623465	20cho06@kprist.ac.in	
2	Gokila H	Student / Chemical Engineering	KPR Institute of Engineering and Technology	8940430605	20cho13@kprist.ac.in	M. Gokila
3	J. Jeyakumar	Student / Chemical Engineering	KPR Institute of Engineering and Technology	9597975780	jjeikumar@gmail.com	J. Jeyakumar
4	Judith Infanta H	Student / Chemical Engineering	KPR Institute of Engineering and Technology	8703225820	20cho20@kprist.ac.in	Judith Infanta H
5	PARKVATHA KARTHINI G. K	Student / Chemical Engineering	KPR Institute of Engineering and Technology	6367007575	20cho23@kprist.ac.in	Parkvatha K
6	Dr. D. REVATHI	AP (Sr.G) / Chemical Engineering	Kongu Engineering College, Perundurai	9487505929	revathi.chemical@gmail.com	
7	Mugai'shudeen G	AP (Sr.G) / Chemical Engineering	Kongu Engineering College, Perundurai	9842040470	mugai.chen@kongu.edu	
8	Jaya Bharathi J.	AP / Chemical Engineering	Kongu Engineering College, Perundurai	9790670861	jaya.chen@kongu.edu	

9.	Dr Payel Anand	AP/chemical engineering	Kongu Engineering College	7777777777	anandpayel.chem@kongu.ac.in	Dr. Anand
10.	Sajitha A.S	AP/chemical engineering	Kongu Engineering College	7306645200	sajitha.chem@kongu.edu	Sajitha
11.	Vaishnavi S.	AP/chemical engineering	Erede Sengunthar Engineering College	9894811045	vaishnavi.chem@eredsengunthar.ac.in	Vaishnavi
12.	Dr V Sangeetha	Associate Prof chemical Engg	Kongu Engg college	9842399016	vengunthas@kongu.ac.in	Prof. V. Sangeetha
13.	Sekharvel A.	Lecturer/ petrochemical engineering	Nandha Polytechnic College	973127615	sekharvel.chem@nandha.ac.in	Sekharvel
14.	M. SIVACHANDRAN	HOD/CHEMICAL	THE KAVERI POLYTECHNIC/COLEVE	9135705911	sivachem@kaveri.ac.in	M. Sivachandran
15.	Balasubramoni R	AP/chemical engineering	Paavai Engineering College	9020856166	rbalasubramani.15@paavai.ac.in	Balasubramoni
16.	Sachin A.	Student/Food technology	Paavai Engineering College	9750231554	sachin130225@gmail.com	Sachin
17.	S. Deenathayalan	Student/Food Technology	Paavai Engineering College	7358775076	deenathayalan10022002@gmail.com	S. Deenathayalan
18.	M. Siva Harish	Student/Food Technology	Paavai Engineering College	9000551100	harishchem125@gmail.com	M. Siva Harish
19.	V. Mohamed Mufaziz	Student/Food Technology	Paavai Engineering College	9150802489	mufaziz24122001@gmail.com	M. Mufaziz
20.	A. Badri Narayanan	Student chemical Engg	Paavai Engineering College	7743185312	badrinarayanan1512@gmail.com	A. Badri Narayanan
21.	P. Ragupathi	Student chemical Engg	Paavai Engineering College	6369340025	ragu.rathi07102000@gmail.com	P. Ragupathi
22.	E. Gautham	Student chemical Engg	Paavai Engineering College	9005199723	gautham0601@gmail.com	E. Gautham

23.	Akash Dobu J.S	Student / Food Technology	Poovai Engineering College, Namakkal	8752051809	akashdobu216@gmail.com	
24.	S. Narayan Kumar	Student / Food Technology	Poovai Engineering College, Namakkal	6369568854	narayanakumar149ec@gmail.com	
25	G. BALAJI	Food Technology/ Student	Poovai Engineering College, Namakkal	638332838	balajig15025@gmail.com	
26	J Deepak	Food Technology Student	Poovai Engineering College, Namakkal	8754652025	deepakrojan812@gmail.com	J. D.
27	M. Saran Kokitha	Foodtech Student	Poovai Engineering College, Namakkal	877812944	sarankokitha@gmail.com	M. S. K.
28.	J. Saran Kumar	Chemical Eng Student	Poovai Engineering College, Namakkal	6381919811	sarankumar10527@gmail.com	J. S. K.
29	R. Karthikeyan	Chemical Eng Student	Poovai Engineering College, Namakkal	402093076	t.darsh0556@gmail.com	R. Karthikeyan
30.	A. Manju Sri	Assistant Prof. Chemical Engineering	Kongu Engineering College, Pondicherry	9788432848	manjusri.kongu@gmail.com	A. Manju Sri
31	Lakshmi Priya J	AP CHEMICAL	KONGU ENGINEERING COLLEGE	9002707114	lakshmiPriya-chem@ kongu.edu	Lakshmi Priya 19/11/21
32	Gokila S.	AP / Chemical Engineering	Erude Sengudhar Engineering College	9976071102	gokilashanmugam98@gmail.com	G. S. 19/11/21
33	M. Dhinesh Kumar	Chemical Eng Student	Poovai Engineering College, Namakkal	9360879896	dhineshkumar14793@gmail.com	M. D. K.
34	N. Arwin	Chemical Engineering Student	Poovai Engineering College, Namakkal	7395843930	arwinarwin2001@gmail.com	N. Arwin
35	S. Gunthakumar	AP / Food Technology	Poovai Engineering College, Namakkal	8883454641	gunthakumar5076@gmail.com	S. Gunthakumar 19/11/21
36	K. Maruthathurai	Assistant Professor Chemical Engg	Poovai Engineering College Namakkal	9524354986	maruthathurai4@gmail.com	K. Maruthathurai

37.	M. Panmarian	Assistant Professor Physics	Pannai Engineering College	8670245933	Pannmarian26@gmail.com	@
38.	V. SANTHOSH	Assistant Professor Chemical Engg.	ERODE JENGUNTHAR ENGINEERING COLLEGE	9003656710	V.santhoshchemical@gmail.com	v.santhosh
39.	M. NAVEEN KUMAR	Research Scholar Chemical Engg.	Kongu Engineering College	9790616264	ci.naveenmanku@gmail.com	M. Naveen
40.	Vigneshwari T.	Student/KEC	Kongu Engineering College	81 89 89 1872	vigneshwarithirunuvargan@gmail.com	Vignesh
41.	Ramanan, M	Student/KEC	Kongu Engineering College	95420 51155	Rao Ramanan15102000@gmail.com	Ramanan
42.	Vijai V.R	Student/KEC	Kongu Engineering College	8940143808	vijai.vr@gmail.com	Vijai
43.	Hariprasanth P	Student/KEC	Kongu Engineering College	7539946014	hariprasanthp102200@gmail.com	P. Hariprasanth
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45.	Aishwarya A.C	Student/KEC	Kongu Engineering College	9443180222	aishwaryahuss2@gmail.com	Aishwarya


 (Dr. K. Senthil Kumar)


 (Dr. P.P. Sarvi)





KONGU ENGINEERING COLLEGE

(Autonomous)

PERUNDURAI ERODE 638 060 TAMILNADU INDIA

Department of Chemical Engineering



CERTIFICATE

This is to certify that Mr./Ms./Dr. _____
has participated in the CSIR sponsored National Seminar entitled "Greenhouse Gas Emissions and Carbon
Dioxide Sequestration by Agroforestry Systems for Sustainable Future" held on 19.11.2021 organized by the
Department of Chemical Engineering, Kongu Engineering College, Perundurai, Erode.

Co-ordinator

Head of the Department

Principal





COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH
HUMAN RESOURCE DEVELOPMENT GROUP
CSIR COMPLEX, OPP INSTITUTE OF HOTEL MANAGEMENT
LIBRARY AVENUE, PUSA, NEW DELHI- 110012, INDIA
Email: tgsm[at]csirhrdg[dot]res[dot]in
Phone:0112584107

Symposia Grant Scheme for Organising Scientific Events (Symposia/
Seminars / Conferences/ workshops, etc. within India

GRANT-IN-AID BILL

(To be filled by the Applicant and submitted in duplicate)

Date: 23.11.2021

To: Head, HRD Group, CSIR Complex, Pusa, New Delhi-110012
Reference CSIR Sanction No: SYM/10662/21--HRD

- Name of the Organisation under whose auspices the Scientific Event was organized:
KONGU ENGINEERING COLLEGE, PERUNDURAI
- Title/Name of the Scientific Event : **Green house gas emissions and carbon dioxide sequestration by agro forestry for the sustainable future**
- Venue of the Event (Address) : **Chanakya Seminar Hall, Kongu Engg. College, Erode**
- Period:

From			To		
Date	Month	Year	Date	Month	Year
19	11	2021	19	11	2021

- Brief report (highlights) of the Scientific Event (Less than 1000 words- Attach separate sheet)
Attached
- (a) Grant Sanctioned: Rs. 15,000 (Rupees Fifteen thousand only) (b) Total Actual Expenditure: Rs. 15,000 (Rupees Fifteen thousand only) (c) **Actual expenditure** as per Attached Audited Statement of Expenditure for claim from CSIR: Rs.15,000 (Rupees Fifteen thousand only)

7. Pl tick mark (✓) the name of the authority to whom the NEFT payment is to be made:

S.No.	Authority	Mark ✓
i.	Director	
ii.	Registrar	
iii.	Dean	
iv.	Finance Officer	
v.	Medical Superintendent	
vi.	Principal	✓
vii.	Any Other Authority designated by your Organization/Institute (Kindly specify _____)	

Note : Grant will be released in the account of Society/Institution/Organization etc only

Certified that the amount claimed in this bill was utilized for the purpose for which it has been sanctioned, and the Audited Statement of Expenditure is enclosed as per requirement.

Organizer:

Signature P.P. Selvi
Name: Dr. P.P. SELVI
Designation: Assistant Professor (Sr. Gr)
Address: Dept. of Chemical Engg., Kongu Engg. College
City Erode State Tamil Nadu Pin 638 060
Mob No. 9842308431
Email ID Selvi.Chem@kongu.edu
Seal / Stamp

Dr. P.P. SELVI, M.Tech., Ph.D.,
Assistant Professor,
Department of Chemical Engineering,
Kongu Engineering College,
Perundurai, Erode - 638 060

Head of the Organisation (Place of Event)

Signature Dr. V. Balusamy
Name: Dr. V. BALUSAMY
Designation: Principal
Address: Kongu Engineering College
City Erode State TN Pin 638 060
Mob No. 9942820583
Email ID Principal@kongu.ac.in
Seal / Stamp

PRINCIPAL
KONGU ENGINEERING COLLEGE
THOPPUPALAYAM (PO)
PERUNDURAI (TK), ERODE - 638 060
TAMILNADU, INDIA

TO BE FILLED BY CSIR-EMR

Budget Head- EMR (Misc.) P81-104

It is certified that no AC /UC is pending from the Organization/institute in connection with earlier such grants released to them.

Pay: Rs: _____ (Rupees _____)
Name of the authority to whom the NEFT payment is to be made: Director/Registrar/
Dean/Medical Superintendent/ Principal/Finance Officer / _____
as per NEFT format enclosed.

Deputy/Under Secretary /DDO

TO BE FILLED BY CSIR-Audit (EMR III)

MBR No. _____ Dated: _____ Pay Rs. _____ (Rupees: _____)

Dealing Assistant

SO (F&A)/F&AO/DyFA

Rs _____ paid vide Cheque No _____ Dated _____ through NEFT/RTGS



Kongu Engineering College
Perundurai, Erode – 638 060, Tamilnadu



DEPARTMENT OF CHEMICAL ENGINEERING



Council of Scientific & Industrial Research (CSIR), New Delhi

Sponsored

National Seminar on

‘Greenhouse gas emissions and Carbon dioxide sequestration by Agroforestry systems for sustainable future’

19th November 2021

COMPLETION REPORT OF THE SEMINAR

Introduction

The Green House Gasses (carbon-di-oxide) sequestration is the urgent need to protect the atmosphere and avoid global warming and hence prevent climatic changes. CO₂ emissions to air from point sources can be controlled by capturing CO₂ as high pressure fluid and shipped to places where they are injected into pure space at depths below portable waters. Advanced future studies needed for technology development for recycle and reuse from energy installations are included in the deliberations. This seminar provides an opportunity to discuss about the possible use of the various innovative green technologies and advanced methods will certainly help the society and the world in the era of new product development with the minimum impact on atmosphere.

Renowned experts who have rich and adequate teaching and research experience delivered the lectures well. This seminar is beneficial to faculty, industrial people, research, PG and UG students, from Chemical Engineering, Biotechnology, Environmental Engineering, Chemistry and biotechnology, etc. disciplines as a potential and knowledge tool in their research activities and to

motivate the students to do innovative projects which will be beneficial to the society. This seminar aims to provide knowledge about various available Innovative Green Technologies for Sequestration of green house gases and strategies with the minimum impact on atmosphere, climate change etc.

Objectives of the Programme

The aim of the seminar is to analyse the technologies available to achieve reduction in green house emissions at an affordable prize and also to provide a comprehensive and structured exposure about knowledge on various available Innovative Green Technologies for Sequestration of green house gases and also to discuss about the strategies for producing products with the minimum impact on atmosphere. Besides, the objectives are

1. To create awareness about the effects of sequestration of green house gases among the students, faculty, etc.
2. To Learn about "Low-Carbon Agriculture Plan"
3. To know about agroforestry and biochar to offset climate change
4. To discuss about soil organic carbon sequestration
5. To elaborate agroforestry for ecosystem services and environmental benefits
6. To explain advancements of Green house gases sequestration techniques and reduction of Carbon footprint generated by animal production
7. To discuss about application of Green Technology concepts towards sustainable development and application of Agrosilvopastoral and Silvopastoral systems as agroforestry system to mitigate GHG.
8. Research challenges in the agroforestry system to sequestration techniques

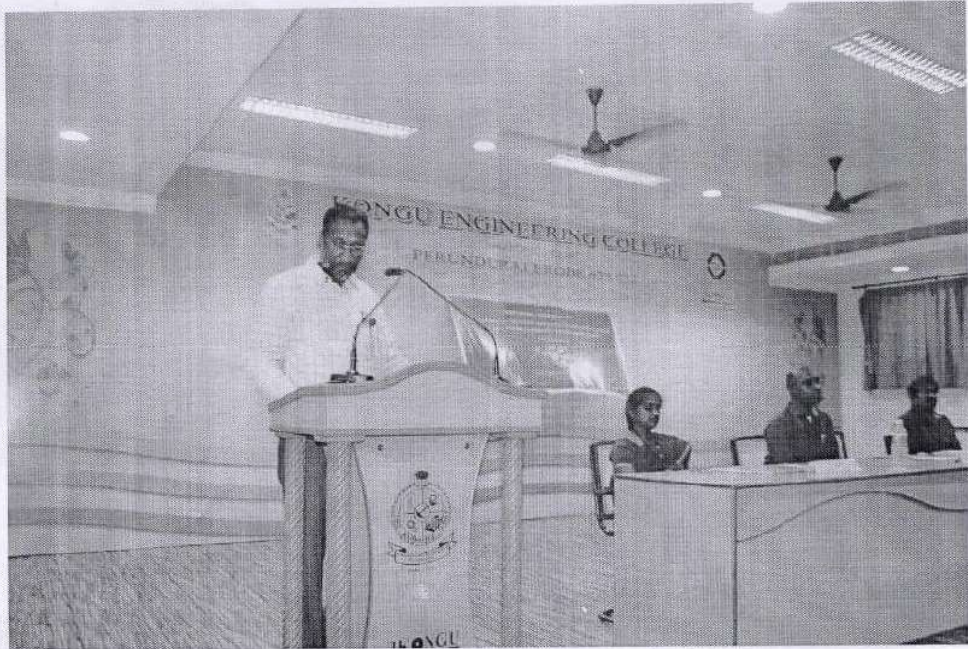
Programme Schedule

The programme is designed in such a way that the participant should able to know about Carbon capture and Sequestration techniques, Strategy for minimization of CO₂ emissions, Climate Change Regulatory Process, techniques for preventing climate change and tsunami etc. The detailed Programme schedule is enclosed as Annexure I.

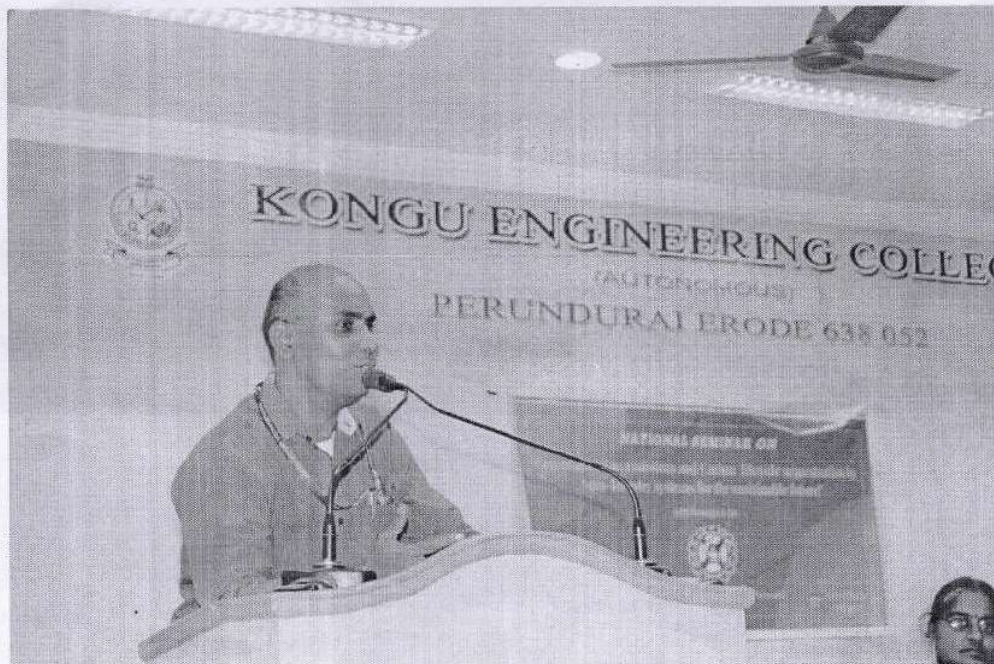
Execution of the Programme

With the above aim and objectives in mind, we had applied to Council of Scientific and Industrial Research (CSIR), New Delhi in the academic year 2021-22. The Council has approved the Programme and sanctioned Rs. 15,000/- (Rupees Fifteen thousand only) to conduct the programme.

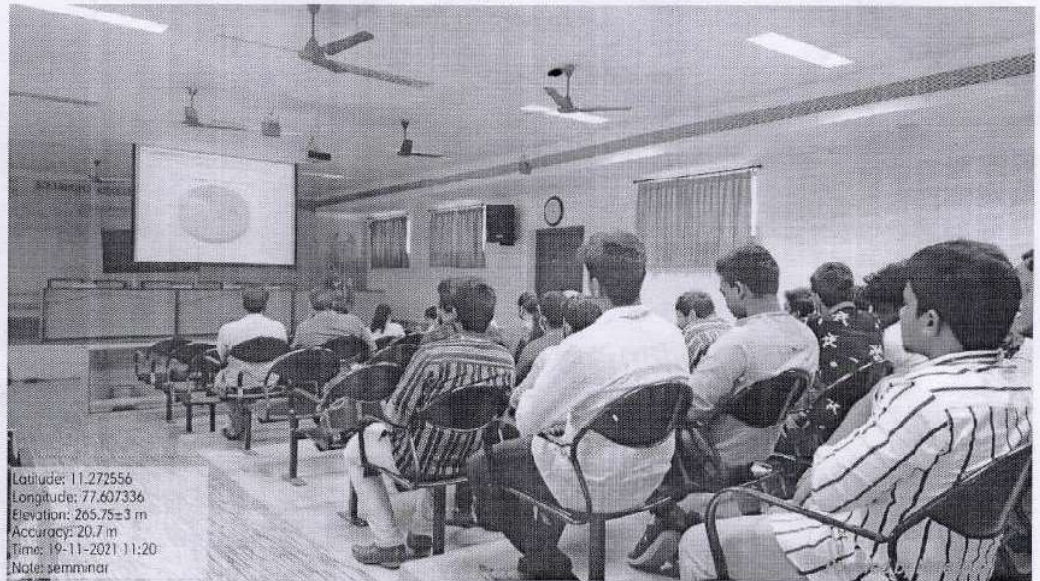
Important Snap Shots



Dignitaries on the stage during Inauguration of CSIR sponsored National Seminar
Felicitation by Dr.K.Kannan



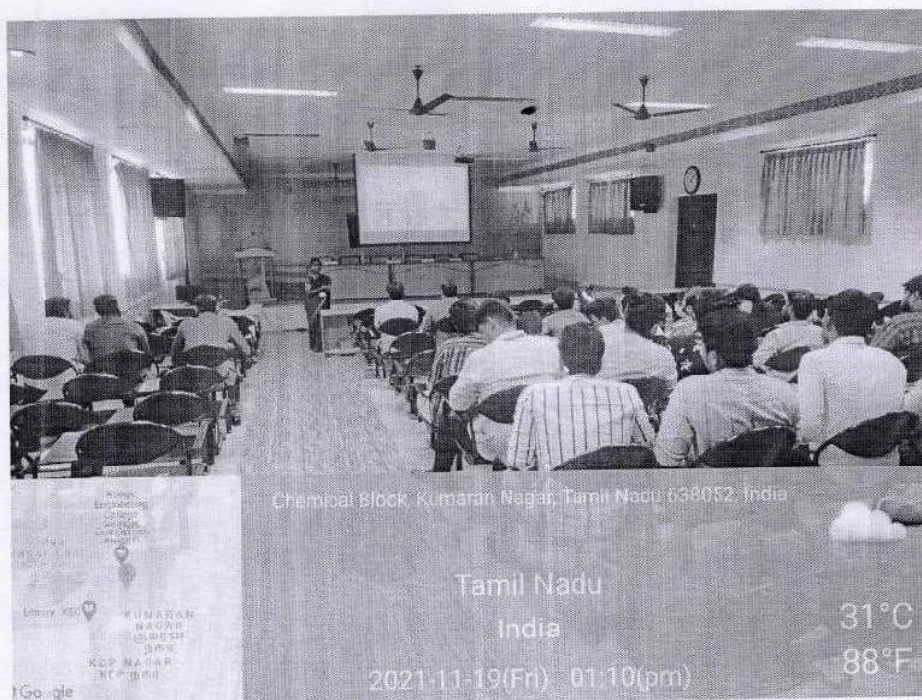
Chief Guest Inaugural address



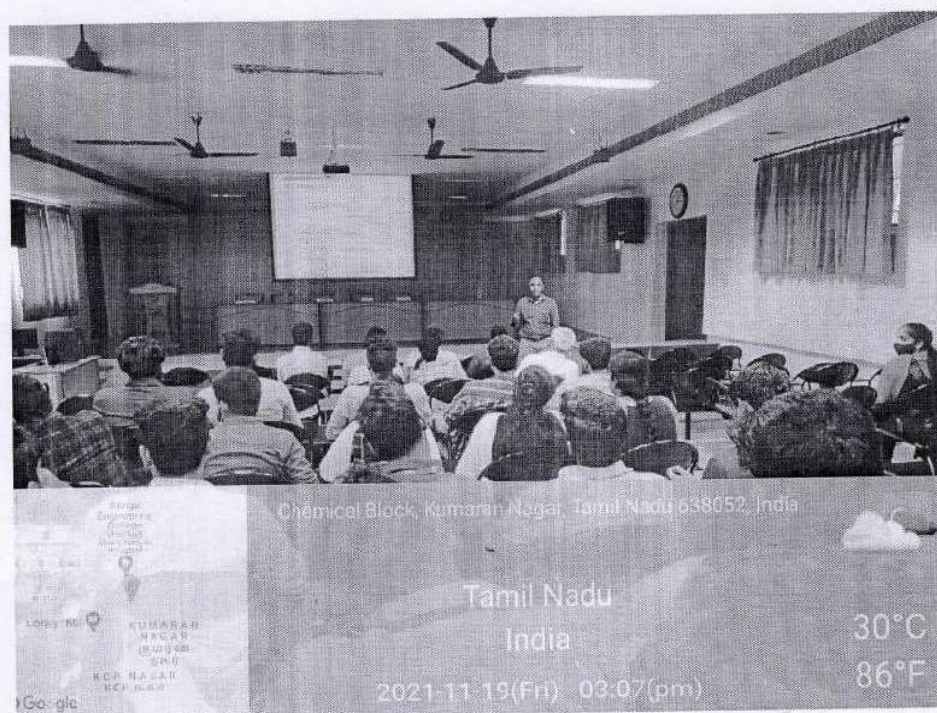
Presentation by Dr. R. Udhaya Baskar Reddy



Presentation by Dr. K. Senthilkumar



Presentation by Dr.P.P.Selvi



Presentation by Dr. R. Udhaya Baskar Reddy



Kongu Engineering College
Perundurai, Erode – 638 060, Tamilnadu



DEPARTMENT OF CHEMICAL ENGINEERING

National Seminar on

‘Greenhouse gas emissions and Carbon dioxide sequestration by Agroforestry systems for sustainable future’



Sponsored by
Council of Scientific & Industrial Research (CSIR), New Delhi

Programme Schedule(Annexure I)

Date: 19th November 2021

Venue: Chanakya Seminar Hall

<i>Time</i>	<i>Programme</i>
08.45 AM to 09.30 AM	INAGURATION
09.30 AM to 11.00 AM	Presentation by Dr.R.Udaya Baskar Reddy
11.00 AM to 11.15 AM	Presentation by Dr.K.Senthilkumar
12.15PM to 01.15 PM	Presentation by Dr.P.P.Selvi
01.15 PM to 02.00 PM	Lunch
02.00 PM to 03.30 PM	Presentation by Dr.R.Udaya Baskar Reddy
03.30 PM to 03.45 PM	Tea Break
03.45 PM to 04.30 PM	Certificate Distribution

The Seminar details in the form of Brochure printed and were sent to Engineering and Polytechnics Colleges throughout the country, out of which more applicants had responded to participate in the seminar. Finally 45 people have confirmed their participation to attend their programme.

Resource Persons

The resource persons who had worked on CO₂ sequestration, environmental engineering, Carbon capture etc. from renowned institutions are invited for the seminar.

The programme was inaugurated by Dr. Udhaya Bhaskar Reddy, Department of Chemical Engineering, Amritha University, Coimbatore on 19.11.2021 in Chanakya Seminar Hall of Kongu Engineering College. Dr.K.Kannan, HoD of Chemical Engineering department preside over the function and delivered the presidential address. Dr. P.P.Selvi, Co-Ordinator, welcomed the gathering and presented a report about the program. The chief guest delivered the inaugural address.

Dr. K.Senthilkumar, Associate Professor/Chemical Engineering proposed the vote of thanks. The program was attended by all the Participants, along with other invitees and Professors. Some Important Photographs of inauguration and rest of the program are enclosed.

Some of the participants responded with their feedbacks highlighting the pros and cons of the programme. All feedbacks were found to be satisfactory. Certificates to the participants were distributed by the chief guest.




ORGANIZER 



COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH
HUMAN RESOURCE DEVELOPMENT GROUP
CSIR COMPLEX, OPP INSTITUTE OF HOTEL MANAGEMENT
LIBRARY AVENUE, PUSA, NEW DELHI- 110012, INDIA

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Phone: 0112584107

Symposia Grant Scheme for Organising Scientific Events (Symposia/
Seminars / Conferences / workshops, etc. within India

AUDITED STATEMENT OF EXPENDITURE To be filled by the applicant in duplicate

Date: 23.11.2021

Reference: CSIR Sanction No: SYM/10662/21-HRD

1. Name of the Society / Organisation under whose auspices the Event was organized:
KONGU ENGINEERING COLLEGE, PERUNDURAI

2 Title/Name of the Event: **Green house gas emissions and carbon dioxide sequestration
by agro forestry for the sustainable future**

3. Period:

From			To		
Date	Month	Year	Date	Month	Year
19	11	2021	19	11	2021

4. Grant Sanctioned: Rs. 15,000 (Rupees Fifteen thousand only)

5. Certified that out of Total Expenditure of Rs. 15,000 (Rupees Fifteen thousand only) CSIR Grant of Rs. 15,000 (Rupees Fifteen thousand only) has been utilized as per the details given below:

S. No.	Budget Head	Amount (Rs)
i	Travel expenses for c. Senior scientists: d. Young Scientists :	5,000.00
ii	Registration Fee Waiver c. Senior scientists: d. Young Scientists :	NIL
iii	Promotion (web site, brochures, others)	4,130.00
iv	Secretarial assistance	2,000.00
v	Local Hospitality	3,870.00
vi	Venue Charges	NIL
	TOTAL	15,000

Certified by: (PL ENSURE ALL SIGNATURES ARE ON THIS PAGE ONLY)

Organizer:

**Finance Officer/
Chartered Accountant**

Head of Organisation

Signature

Name: **Dr. P.P. SELVI**

Designation: **Assistant Professor**

Mob No.: **9842308431**

Email ID: **Selvi.Chem@kongu.edu**

Seal / Stamp

**Dr. P.P. SELVI, Assistant Professor,
Department of Chemical Engineering,
Kongu Engineering College,
Perundurai, Erode - 638 060.**

Signature

Name:

UDIN: 21026921AAAAHW6285

G. VELUMANI, B.Sc. F.C.A.

Chartered Accountant

33/1, Annamalai Layout,

Nall Hospital Road, ERODE

M.No: 026921.

Signature

Name

Dr. V. BALUSAMY

Designation: **Principal**

Mob No.: **9942820583**

Email ID: **principal@kongu.ac.in**

Seal / Stamp

**PRINCIPAL
KONGU ENGINEERING COLLEGE
THOPPUPALAYAM (PO)
PERUNDURAI (TK), ERODE - 638 060
TAMILNADU, INDIA**

8/11/21

30/11/21

11/12/21

Annexure 5
Form-CSIR/SYM/19/NEFT

NATIONAL ELECTRONIC FUND TRANSFER (NEFT) FORMAT

1	Account Holders Name/Name of the Beneficiary	KONGU ENGINEERING COLLEGE GRANTS		
2	Bank Account Number	1247155000001832		
3	Name of the Bank	Karur Vysya Bank		
4	Branch Address	KEC Nagar, Thoppupalayam Branch, Perundurai, Erode		
5	Branch Code	1247		
6	Account type/Nature of Account (Pl tick <input checked="" type="checkbox"/> mark)	Saving <input checked="" type="checkbox"/>	Current	Overdraft
7	IFSC Code of the Bank	KVBL0001247		
8	MICR Number	638053013		
9	Mobile No. of the Candidate	9842308431		
10	Email id of the Candidate	selvi.chem@kongu.edu		

<p><i>P. Balasubramanie</i> 1/12/21</p> <p>Signature of the Head of the Institute/Director/Registrar/Dean/principal/Administrative Officer/Finance Officer</p> <p>Dr. P. BALASUBRAMANIE REGISTRAR</p> <p>Name: KONGU ENGINEERING COLLEGE Date: THOPPUPALAYAM (Po) Seal: PERUNDURAI, ERODE - 638 060, TAMILNADU, INDIA,</p>	<p>Certified by (Bank) <i>[Signature]</i></p> <p>Signature of the Bank Official</p> <p>Name: <u>MEENASHRI. R</u></p> <p>Date: <u>02/12/2021</u></p> <p>Seal</p>
---	---



TO BE FILLED BY CSIR

Narration: CSIR SYM
(To be used by Bank while transferring the Payment/Grant)

Deputy/Under Secretary/DDO